

## STATE OF ARKANSAS

Mike Beebe Governor

March 28, 2008

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Richard Greene, Regional Administrator United States EPA, Region VI 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Dear Mr. Greene:

On behalf of the Arkansas Department of Environmental Quality (ADEQ), I am pleased to submit this document in response to the requirements found in Sections 110(a)(1) and (2) of the Clean Air Act (CAA).

This document is a revision to the Arkansas State Implementation Plan (SIP) to address interstate transport of air pollution under CAA Section 110(a)(2)(D)(i). The information in this document demonstrates that Arkansas sources do not significantly contribute to the interstate transport of pollutants that impact nonattainment in, or interfere with maintenance by, any other state with respect to the particulate matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>) National Ambient Air Quality Standards (NAAQS). It demonstrates that Arkansas meets the required prevention of significant deterioration of air quality and protection of visibility provisions of the law.

The ADEQ has evaluated Arkansas's existing SIP for implementation of the 1997 8-hour ozone NAAQS and the 2006 PM<sub>2.5</sub> NAAQS to determine if it includes all the requirements in Section 110 (a) (1) and (2) of the CAA and is consistent with the guidance provided to the Regional Air Division Directors from William T. Harnett, Director, Air Quality Policy Division on October 2, 2007. The Department concludes and certifies that our SIP does meet these requirements. The ADEQ has evaluated the particulate-matter provisions of our SIP for consistency with federal requirements, and has determined and certified that the SIP provisions are consistent with federal requirements.

In July of 1997, the U.S. Environmental Protection Agency (EPA) issued the NAAQS for PM<sub>2.5</sub>. Section 110(a)(1) of the CAA requires states to submit SIPs within three years following the promulgation of new or revised standards. Litigation delayed implementation of the standards and created uncertainty about how states were to proceed. On March 10, 2005, EPA entered into a Consent Decree with Earth Justice to

address the interstate transport of this pollutant under CAA Section 110(a)(2)(D)(i). On April 25, 2005, EPA published a "Finding of Failure to Submit Section 110 State Implementation Plans for Interstate Transport for the National Ambient Air Quality Standards for 8-Hour Ozone and PM<sub>2.5</sub>" (70 FR 21147). The April 25, 2005, finding started a 24-month clock for EPA to either issue a final Federal Implementation Plan (FIP) to address the requirements of Section 110(a)(2)(D)(i) or to approve a SIP that addresses these requirements.

Each state must submit a SIP that contains adequate provisions "prohibiting ....any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will —

- (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any national primary or secondary air quality standard, or
- (II) interfere with measures required to be included in the applicable implementation plan for any other State to prevent significant deterioration or to protect visibility."

EPA published a guidance titled "SIP Guidance on Section 110(a)(2)(D)(i) Findings of Failure to Submit" on August 11, 2006. The guidance outlines four prongs that states must address in their 110(a)(2)(D)(i) SIPs "prohibiting ....any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will –

- 1. Contribute significantly to nonattainment of the NAAQS for areas in another state.
- 2. Interfere with maintenance of the NAAQS by any other state.
- 3. Interfere with measures required to meet implementation plans for any other state ... related to Prevention of Significant Deterioration (PSD).
- 4. Interfere with measures required to meet the implementation plan for any other state ... related to Regional Haze and Visibility.

This letter addresses each of these four elements.

Items one (1) and two (2) can be addressed using the Clean Air Interstate Rule (CAIR) and associated air-quality modeling that EPA performed. CAIR will control the interstate transport of NO<sub>x</sub> and SO<sub>2</sub> emitted by fossil-fuel fired Electric Generating Units (EGUs) by creating an interstate cap and trade program. CAIR has three programs: Annual NO<sub>x</sub>, Ozone Season NO<sub>x</sub> and a year-round SO<sub>2</sub> program. Of the three programs

in CAIR, EPA demonstrated through modeling that Arkansas would only participate in the Ozone Season NO<sub>x</sub> program.

EPA published a guidance titled "Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards" dated August 15, 2006. That guidance states "...States within the CAIR region need not submit a SIP revision to satisfy CAIR."

To determine which states impact nonattainment in other states, EPA performed ozone-contribution modeling, using both source-apportionment modeling and zero-out modeling using the CAM-x model techniques for 31 states in the East and the District of Columbia, including Arkansas. (See Final CAIR Preamble at, 70 FR 25249, May 12, 2005). EPA determined that Arkansas contributes to ground-level ozone formation in Texas. Arkansas submitted a SIP to EPA to address the transport of oxides of nitrogen (NO<sub>x</sub>) from Arkansas sources in the form of a CAIR SIP. EPA published their approval of the SIP on September 26, 2007, and it became final on November 26, 2007.

In addition to the ozone modeling, 37 states were modeled for potential inclusion in the final CAIR by EPA to address PM<sub>2.5</sub>. Fourteen of these states, including Arkansas, were not included in the CAIR, because they did not contribute at least 0.2 ug/m3 to downwind nonattainment. (See Final CAIR Preamble at, 70 FR 25246, May 12, 2005). Since it was found that Arkansas does not significantly contribute to downwind PM<sub>2.5</sub> nonattainment areas, there is no requirement that Arkansas submit regulation changes and a SIP to address this matter.

Each SIP must include a preconstruction review program for major sources to satisfy the requirements of section 110(a)(2)(D)(i) of the CAA. For nonattainment areas this is the Nonattainment New Source Review (NNSR) program, and in attainment areas this is the PSD program. The PSD requirements in Item three (3) can and have been addressed in an existing Arkansas SIP and related regulatory language that has been approved by EPA. The August 2006 guidance states, "Because all areas are currently subject to some form of preconstruction-permitting program for ozone and PM<sub>2.5</sub>, it is not necessary, at this time, for states to make a SIP submission containing rule changes or modeling demonstration to address section 110(a)(2)(D)(i)(II)."

This SIP revision certifies that Arkansas has EPA-approved PSD and NNSR programs in place to prevent significant deterioration of air quality in Arkansas and neighboring states. Major sources in Arkansas are currently subject to PSD and NNSR

permitting programs that implement the 8-hour ozone and PM<sub>2.5</sub> standards. PSD regulatory language can be found in Chapter 9 of the Arkansas Pollution Control and Ecology Commission Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control. NNSR regulatory language can be found in Arkansas Pollution Control and Ecology Commission Regulation 31, Nonattainment New Source Review Requirements.

There was a deadline of June 15, 2007, for states to submit SIPs that incorporate the requirements of the phase II ozone implementation rule into their PSD and NNSR programs. It was not necessary for Arkansas to make changes to the regulatory language to address these requirements, because EPA has not found the Arkansas PSD program to be deficient, and all of the existing Arkansas NNSR program requirements address the requirements.

Arkansas has met the requirements for Item four (4) regarding the protection of visibility in section 110(a)(2)(D)(i). The Arkansas Pollution Control and Ecology Commission adopted Chapter 15 of Regulation 19 that established regional haze program requirements on October 15, 2007. The regulation became effective October 15, 2007. At this time, it is not possible to assess whether there is any interference with measures in the applicable SIP for another state designed to protect visibility for the 8-hour ozone and  $PM_{2.5}$  NAAQS until Arkansas's regional haze SIP is submitted and approved by EPA.

The State of Arkansas hereby submits to the EPA that it has met the requirements for section 110(a)(2)(D)(i) of the CAA for the 8-hour ozone and  $PM_{2.5}$  NAAQS and does not significantly contribute to nonattainment or interfere with maintenance of the NAAQS in other states. Enclosed is a completed template, which was provided by EPA Region 6 and discusses the CAA requirements for section 110(a)(2)(D)(i) of the CAA for the 8-hour ozone and  $PM_{2.5}$  NAAQS. There is one table for ozone and one for  $PM_{2.5}$ .

I look forward to your prompt approval of this SIP submission. If you have any questions, please contact Mike Bates at (501) 682-0750 or bates@adeq.state.ar.us. Thank you for your attention to this matter.

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Mike Beebe

MB:jb

## 110(a)(2)(A)-(M) Requirements in the Current Arkansas Ozone State Implementation Plan (SIP) or Pending SIP Revisions

The federally enforceable State Implementation Plan (SIP) for Arkansas is compiled in 40 CFR Part 52 Subpart NN. Many of the miscellaneous requirements of Section 110(a)(2)(A)-(M) of the Clean Air Act (CAA) relevant to the eight-hour ozone and fine particulate (PM<sub>2.5</sub>) National Ambient Air Quality Standards (NAAQS) are already contained in the current SIP or SIP revisions which have been submitted to but not yet approved by U. S. Environmental Protection Agency (EPA). The following table summarizes where these requirements of Section 110(a)(2)(A)-(M) are addressed.

Section 110(a) element	Summary of element	Provisions in the current Arkansas SIP or recent SIP revision submittals	Where codified or approved by EPA
§110(a)(2)(A)	include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this Act.	Arkansas's enforceable emission limitations and other control measures are covered in the Arkansas Water and Air Pollution Control Act and those provisions of the Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control listed in 40 CFR 52.170.  The regulations in the Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control are duly adopted by the Arkansas Pollution Control and Ecology Commission. Where these provisions relate to section 110 requirements, State Implementation Plan (SIP) revisions have been submitted to and approved by EPA. EPA-approved SIP revisions are codified at 40 CFR part 52, subpart E. Arkansas has an EPA-approved air permitting program for both major and minor facilities, which ensures that all applicable requirements are included in the facility	40 CFR 52.170

NOTE: Page 2 of this table was not included in the copies of this submittal submitted to EPA March 28, 2008.

Section 110(a) element	Summary of element	Provisions in the current Arkansas SIP or recent SIP revision submittals	Where codified or approved by EPA
§110(a)(2)(D)	contain adequate provisions—  (i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will—  (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard, or  (II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility,	Arkansas has adopted the Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control Chapter 14, and is in the process of adopting additional requirements related to the federal Clean Air Interstate Rule to reduce the transport of NOx and SO <sub>2</sub> , precursors of ozone and PM <sub>2.5</sub> . A SIP revision pertaining only to §110(a)(2)(D)(i) is being submitted separately. Arkansas is not currently subject to requirements under §§ 115 and 126.	40 CFR 52.170
	(ii) insuring compliance	<u></u>	l

	with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement);		
§110(a)(2)(E)(ii)	(ii) requirements that the state comply with the requirements respecting state boards under section 128, and	The requirement is not applicable because permit and enforcement orders are issued directly by the Arkansas Department of Environmental Quality (ADEQ), not state boards or commissions.	,

Section 110(a) element	Summary of element	Provisions in the current Arkansas SIP or recent SIP revision submittal	Where codified or approved by EPA
§110(a)(2)(F)	require, as may be prescribed by the Administrator—  (i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps by owners or operators of stationary sources to monitor emissions from such sources,  (ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and  (iii) correlation of such reports by the state agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection;	Regulatory requirements have been codified in the Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control Chapter 7 (pertaining to sampling and testing).  Requirements in Chapter 7 Section 19.705 provide for the reporting of emissions inventories in a format established by the Arkansas Department of Environmental Quality on a schedule set forth in the section. In addition, Section 19.705 requires the submission of emission statements as required by the CAA.  Area, mobile, and non-road data are reported on a 3-year cycle.  Enforceable emission limitations and other control measures are covered in the Arkansas Water and Air Pollution Control Act and those provisions of Arkansas Annotated Code 8-4-310 and 8-4-311. Elements of the program for enforcement are found in the monitoring, recordkeeping and reporting requirements for sources in these control measures as well as individual SIP permits.	40 CFR 52.170
§110(a)(2)(G)	provide for authority comparable to that in section 303 and adequate	The Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Chapter 3 adopted July 24, 1992, covers air pollution episodes	40 CFR 52.170

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contingency plans to	and the occurrence of an emergency due to the effects of the pollutants	
implement such authority;	on the health of persons.	

Section 110(a) element	Summary of element	Provisions in the current Arkansas SIP or recent SIP revision submittals	Where codified or approved by EPA
§110(a)(2)(l)	in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D (relating to nonattainment areas);	The Arkansas Pollution Control and Ecology Commission's Regulation 31, Nonattainment New Source Review Requirements covers the requirements of part D for nonattainment areas. Amendments to these requirements to fulfill recent federal requirements were submitted to EPA on July 3, 2006. In preparing SIPs under Part D, Arkansas complies with all applicable requirements for each nonattainment area under sections 110, 172(c), and 175A and subpart 2 to Part D. In addition, Arkansas complies with planning procedures under Section 174. EPA approved all SIPs required under the one-hour ozone standard, indicating full compliance with requirements for classified areas under subpart 2 to Part D; compliance under the eight-hour ozone and PM <sub>2.5</sub> standard will be evaluated with submitted SIPs for each area. The SIP revisions related to nonattainment areas will continue to comply with Subpart D requirements, as applicable, and the currently approved nonattainment area SIP provisions listed in 40 CFR 52.170 which could not have been approved if they had not met Subpart D requirements. These include: The Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Chapter 13 and The Arkansas Pollution Control and Ecology Commission's Regulation 31, Nonattainment New Source Review Requirements.	40 CFR 52.170

Section 110(a) element	Summary of element	Provisions in the current Arkansas SIP or recent SIP revision submittals	Where codified or approved by EPA
§110(a)(2)(J) (PSD)	meet the applicable requirements of part C (relating to prevention of significant deterioration of air quality and visibility protection);	Arkansas has incorporated by reference into the Arkansas Pollution Control and Ecology Commission's Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control Chapter 9, the requirements in 40 CFR 52 under section 161 of the CAA (42 U.S.C.A. § 7471) for prevention of significant deterioration in their entirety. These provisions were approved by EPA as part of the SIP.	40 CFR 52.170
§110(a)(2)(K)	provide for:  (i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and  (ii) the submission, upon request, of data related to such air quality modeling to the Administrator;	Arkansas has submitted the Emissions Inventory SIP revision pertaining to Crittenden County during calendar years 2006 and 2007. These plans submitted the necessary modeling where required. The status of this SIP revision is below:  The Emissions Inventory SIP for Crittenden County was submitted to EPA on November 19, 2007.	

Section 110(a) element	Summary of element	Provisions in the current Arkansas SIP or recent SIP revision submittals	Where codified or approved by EPA
§110(a)(2)(L)	require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover— (i) the reasonable costs of reviewing and acting upon any application for such a permit, and (ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title V;	In addition, the fee requirements of the Arkansas Pollution Control and Ecology Commission's Regulation 26, Regulations of the Arkansas Operating Air Permit Program Chapter 11 were approved by EPA as meeting the CAA requirements and were incorporated into Arkansas's SIP. Arkansas's Title V operating permit program in Chapter 11, was approved October 9, 2001.	40 CFR 52.170